

JUL 05 2006

PATENT

Atty. Dkt. No. MRKS/0091

IN THE CLAIMS:

1. (Previously Presented) A method of lining a drilled bore, the method comprising:
providing a tool having a radially extendable member;
running a tubular into a drilled bore; and
corrugating the tubular in the bore into selected periodic corrugations, each having a substantial circumferential component, wherein the tubular is diametrically expanded at the corrugations and between the corrugations by the radially extendable member configured to also provide the corrugations.
2. (Previously Presented) The method of claim 1, wherein the corrugations of the tubular increases the collapse resistance of the tubular.
3. (Original) The method of claim 1, wherein the tubular is a thin-walled tubular.
4. (Original) The method of claim 3, wherein the tubular has a wall thickness of less than 6 mm.
5. (Original) The method of claim 4, wherein the tubular has a wall thickness of around 3 to 4 mm.
6. (Original) The method of claim 1, wherein the tubular has a wall thickness of at least 6 mm.
7. (Cancelled)
8. (Original) The method of claim 1, wherein the tubular is run in through existing bore-lining tubing having an internal first diameter and the tubular is then expanded to an internal diameter at least as large as the first diameter.

Page 2

477060_1

PATENT
Atty. Dkt. No. MRKS/0091

9. (Cancelled)
10. (Previously Presented) A method of lining a drilled bore, comprising:
running a tubular into a drilled bore;
diametrically expanding the tubular; and
corrugating the tubular in the bore in a separate step from expanding, wherein
the tubular is diametrically expanded before corrugation.
- 11-12. (Cancelled)
13. (Original) The method of claim 1, wherein the tubular is corrugated from the
top down.
14. (Original) The method of claim 1, wherein the tubular is corrugated from the
bottom up.
15. (Previously Presented) The method of claim 1, wherein the tubular is
expanded from the top down.
16. (Original) The method of claim 1, wherein the tubular is expanded from the
bottom up.
17. (Previously Presented) The method of claim 1, further comprising the step of
cementing the tubular in the bore.
18. (Previously Presented) The method of claim 1, wherein the tubular carries a
deformable material on an external surface thereof.
19. (Original) The method of claim 1, wherein the tubular is provided in
combination with a sleeve of deformable material.

PATENT

Atty. Dkt. No. MRKS/0091

20. (Original) The method of claim 1, wherein only a portion of the tubular is corrugated, retaining a section of cylindrical-walled tubular.
21. (Original) The method of claim 1, wherein all of the tubular is corrugated.
22. (Original) The method of claim 1, wherein the corrugations extend solely circumferentially.
23. (Original) The method of claim 1, wherein the corrugations extend helically.
24. (Original) The method of claim 1, further comprising locating at least one further tubular internally of the corrugated tubular.
25. (Original) The method of claim 24, wherein the at least one further tubular has a cylindrical wall.
26. (Original) The method of claim 24, wherein the at least one further tubular is subsequently diametrically expanded.
27. (Previously Presented) The method of claim 1, further comprising locating the tool within the corrugated tubular.
28. (Previously Presented) The method of claim 1, wherein the corrugations are formed by the tool that is a rotary expander featuring at least one bearing member which applies a radial force to an inner wall of the tubular and which expander is rotated within the tubular, and is advanced axially through the tubular.
29. (Original) The method of claim 28, wherein the rotary expander is configured to create a single-start helical corrugation.

PATENT

Atty. Dkt. No. MRKS/0091

30. (Original) The method of claim 28, wherein the rotary expander is configured to create a multiple-start plurality of helical corrugations.

31. (Original) The method of claim 1, wherein the tubular is located to intersect a problem formation.

32. (Previously Presented) A method of lining a drilled bore, the method comprising:

providing a tool having a radially extendable member;
running a tubular into a drilled bore to intersect a problem formation; and
corrugating the tubular in the bore into selected periodic corrugations at least where the tubular intersects the problem formation, each corrugation having a substantial circumferential component, wherein the tubular is diametrically expanded at the corrugations and between the corrugations with the radially extendable member configured to also form the corrugations.

33. (Previously Presented) The method of claim 32, further comprising expanding at least a portion of the tubular separately from corrugating the tubular.

34. (Previously Presented) A method of forming a downhole tubular, comprising:
providing a rotary expansion tool having a radially extendable member; and
corrugating a cylindrical tubular by rotating the rotary expansion tool relative to the tubular to produce selected periodic corrugations, each having a substantial circumferential component, wherein the tubular is diametrically expanded at the corrugations and between the corrugations by the radially extendable member configured to also form the corrugations.

35. (Original) The method of claim 34, wherein the tool is advanced axially relative to the tubing to create at least one helical corrugation.

36. (Cancelled)

PATENT

Atty. Dkt. No. MRKS/0091

37. (Cancelled)

38. (Currently Amended) A downhole tubular having a wall defining helical corrugations and an elongate element located in the troughs of the corrugations, wherein the tubular is made from metal.

39. (Currently Amended) The tubular of claim 38, wherein the elongate element is a signal carrier is located in the troughs of the corrugations.

40. (Currently Amended) The tubular of claim 38, wherein the elongate element is a conduit is located in the troughs of the corrugations.

41. (Currently Amended) The tubular of claim 38, wherein the elongate element is a power carrier is located in the troughs of the corrugations.

42. (Original) The tubular of claim 38, wherein a sensing element is located in the troughs of the corrugations.

43. (Currently Amended) The tubular of claim 38, wherein the elongate element is an optical fiber is located in the troughs of the corrugations.

44-54. (Cancelled)

55. (Original) A method of running tubing into a bore to minimise differential sticking, the method comprising:

identifying whether elongate members located in a selected bore are likely to encounter differential sticking;

providing corrugated tubing; and
running the tubing into the bore.

PATENT

Atty. Dkt. No. MRKS/0091

56. (Currently Amended) A method of running tubing into a bore, the method comprising:

running a corrugated-walled tubular into the bore; and
rotating the tubular in the bore; and
cementing the tubular in the bore.

57. (Original) The method of claim 56, wherein the tubular is a tubing string comprising a plurality of tubing sections joined by relatively rigid connectors.

58. (Currently Amended) The method claim 56, ~~comprising rotating the tubing~~
wherein the tubular is rotated to dislodge sediment in the bore.

59-60. (Cancelled)

61. (Currently Amended) A method of running tubing into a bore, the method comprising:

running a tubular defining a helical corrugated configuration into the bore; and
rotating the tubular in the bore to negotiate a tight spot in the bore.

62-65. (Cancelled)

66. (Currently Amended) A reelable downhole tubular, the tubular having a corrugated wall defining selected periodic corrugations with a substantially circumferential component.

67. (Previously Presented) Downhole tubulars, each tubular comprising at least one corrugated end portion, whereby the tubulars are adapted to be coupled to one another by locating the corrugated end portion of one tubular within the corrugated end portion of another tubular, wherein the corrugations are helical.

68. (Cancelled)

Page 7

477060_1

PATENT

Atty. Dkt. No. MRKS/0091

69. (Cancelled)

70. (Original) The tubulars of claim 67, wherein the corrugated end portions are parallel.

71. (Original) The tubulars of claim 67, wherein the corrugated end portions are tapered.

72. (Original) The tubulars of claim 67, wherein deformable sealing material is provided on the corrugated end portion of at least one of the tubulars.

73-80. (Cancelled)

81. (Original) A method of locating a tubular within a larger diameter bore, the method comprising:

providing a corrugated tubular;
locating the tubular in a larger diameter bore; and
reducing the degree of tension applied to the tubular such that the tubular axially contracts and diametrically expands.

82. (Original) The method of claim 81, wherein the tubular is initially under tension.

83. (Original) The method of claim 81, wherein the degree of tension applied to the tubular is reduced by placing the tubular in compression.

84. (Original) The method of claim 81, wherein the degree of diametric expansion of the tubular is such that the tubular engages the surrounding bore wall.

PATENT

Atty. Dkt. No. MRKS/0091

85. (Original) Completion tubing having at least a portion of corrugated wall to accommodate a degree of at least one of axial compression and expansion.

86. (Previously Presented) The tubing of claim 85, in combination with a seal for locking a lower end of the tubing relative to surrounding bore-lining tubing.

87. (Currently Amended) A method of lining a bore, the method comprising: diametrically expanding a wall of a helically or solely circumferentially corrugated tubular in [[a]] the bore such that the wall is deformed about its entire circumference; and

selecting at least one of a degree of expansion, an expansion method, and a degree of corrugation of the tubular such that the tubular both before and after the diametrically expanding has a length that is substantially unchanged.

88-98. (Cancelled)

99. (Previously Presented) The method of claim 56, further comprising drilling with a drill bit supported by the tubular.

100. (Previously Presented) The method of claim 55, further comprising cementing the tubing in the bore.

101. (Canceled)

102. (Currently Amended) The method of claim 56, ~~further comprising cementing the tubular in the bore while rotating the tubular~~ wherein the tubular is rotated during cementing.

103. (New) The method of claim 1, wherein the tubular is made from metal.

104. (New) The method of claim 10, wherein the tubular is made from metal.

Page 9

477060_1

PATENT

Atty. Dkt. No. MRKS/0091

105. (New) The method of claim 32, wherein the tubular is made from metal.
106. (New) The method of claim 34, wherein the tubular is made from metal.
107. (New) The method of claim 55, wherein the tubular is made from metal.
108. (New) The method of claim 56, wherein the tubular is made from metal.
109. (New) The method of claim 61, wherein the tubular is made from metal.
110. (New) The tubular of claim 66, wherein the tubular is made from metal.
111. (New) The tubulars of claim 67, wherein the tubulars are made from metal.
112. (New) The method of claim 81, wherein the tubular is made from metal.
113. (New) The tubing of claim 85, wherein the tubular is made from metal.
114. (New) The method of claim 87, wherein the tubular is made from metal.
115. (New) The method of claim 38, wherein the troughs are internal troughs.
116. (New) The method of claim 38, wherein the troughs are external troughs.
117. (New) The method of claim 56, further comprising expanding the tubular.
118. (New) A method of running tubing into a bore, the method comprising:
running a tubular defining a helical corrugated configuration into the bore; and

PATENT

Atty. Dkt. No. MRKS/0091

rotating the tubular in the bore a predetermined number of times to advance the tubular a predetermined axial distance in the bore, related to the pitch of the corrugations.

119. (New) The tubular of claim 66, wherein the corrugations are solely circumferential.

120. (New) The tubular of claim 66, wherein the corrugations helical.